

What Works Clearinghouse

A trusted source of scientific evidence of what works in education.

IES



FREQUENTLY ASKED QUESTIONS

JUNE 2004

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OVERVIEW OF THE WHAT WORKS CLEARINGHOUSE

What is the What Works Clearinghouse?

The What Works Clearinghouse (WWC) was established in 2002 by the [U.S. Department of Education's Institute of Education Sciences](#) to provide educators, policymakers, researchers, and the public with a central and trusted source of scientific evidence of what works in education. It is administered by the Department through a contract to a joint venture of the American Institutes for Research and the Campbell Collaboration.

Through a set of accessible databases and user-friendly reports, the WWC provides education consumers with ongoing, high-quality reviews of the effectiveness of replicable educational interventions (programs, products, practices, and policies) that intend to improve student outcomes.

Why is the What Works Clearinghouse important?

The current nationwide emphasis on ensuring that all students and schools meet high standards has increased the demand for evidence of “what works” in education. Currently, few resources exist to help education decision makers differentiate high-quality research from weaker research and promotional claims. As a decision-making tool, the What Works Clearinghouse helps the education community locate and recognize credible and reliable evidence to make informed decisions.

What topic areas are initially being explored?

The following initial topics were chosen through a systematic process that included public review (please see FAQ on [How does the What Works Clearinghouse define “topic”?](#)):

- **Adult Literacy—Interventions for Increasing Adult Literacy**
Interventions that focus on improving literacy and language skills needed to function effectively in everyday life. These include interventions for adult non-native speakers of English and adults who are proficient in spoken English, but lack basic literacy skills. [abstract](#)
- **Character Education—Character Education Interventions: Benefits for Character Traits, Behavioral, and Academic Outcomes**
Interventions that are intended to develop character traits and related behaviors of students. Examples of the possible types of interventions to be included are programs designed to promote a caring school community, citizen and civics educational programs, ethics or moral education curricula, and service learning. [abstract](#)

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- **Delinquent, Disorderly, and Violent Behavior—Interventions to Reduce Delinquent, Disorderly, and Violent Behavior in Middle and High Schools**
Interventions aimed at preventing or reducing disruptive, illegal, or violent behavior among middle and high school students. These interventions may be administered in a mainstream setting, such as a school, or in an alternative setting and may provide individual or group-based treatment. [abstract](#)
 - **Dropout Prevention—Interventions for Preventing High School Dropout**
Interventions in middle school, junior high school, or high school designed to increase high school completion, including techniques such as the use of incentives, counseling, or monitoring. [abstract](#)
 - **English Language Learning—Interventions for Elementary School English Language Learners: Increasing English Language Acquisition and Academic Achievement**
Interventions designed to improve the English language literacy or academic achievement of elementary school students who are English language learners. [abstract](#)
 - **Math—Curriculum-Based Interventions for Increasing K–12 Math Achievement**
Curriculum-based interventions outlining the fundamentals of mathematics that students should know and be able to do, instructional programs and materials that organize the mathematical content, and assessments. Within the broad topic of math curricula, the WWC will focus the first set of reports on middle school, next on elementary school, and later on high school math. [abstract](#)
 - **Peer-Assisted Learning—Peer-Assisted Learning Interventions in Elementary Schools: Reading, Mathematics, and Science Gains**
Interventions that are designed to improve an elementary school academic outcome (for example, in reading, mathematics, or science) and that routinely use students to teach each other in pairs or in small groups. [abstract](#)
 - **Reading—Interventions for Beginning Reading**
Reading interventions for students in grades K–3 that are intended to increase phonemic awareness, phonics, reading fluency, vocabulary development, reading comprehension, or any combination of these reading skills. Within the broad topic of beginning reading, the WWC will focus the first set of reports on interventions for students who are having difficulties developing beginning reading skills, and next on interventions designed for general beginning reading students. [abstract](#)

Would you like to submit a topic for future consideration by the WWC? More information is available at [Submitting a Topic for Future Review](#).

WHAT WORKS CLEARINGHOUSE: DEFINITIONS, STANDARDS, AND REVIEW PROCESS

What is scientifically based research?

According to the [Institute of Education Sciences](#), scientifically based research:

- employs systematic, empirical methods that draw on observation or experiment; involves data analyses that are adequate to support the general findings; relies on measurements or observational methods that provide reliable data; makes claims of causal relationships only in random-assignment experiments or other designs (to the extent such designs substantially eliminate plausible competing explanations for the obtained results);
- ensures that studies and methods are presented in sufficient detail and clarity to allow for replication or, at a minimum, to offer the opportunity to build systematically on the findings of the research;
- obtains acceptance by a peer-reviewed journal or approval by a panel of independent experts through a comparably rigorous, objective, and scientific review; and
- uses research designs and methods appropriate to the research question posed.

How does the What Works Clearinghouse define “intervention”?

Interventions are programs (for example, Accelerated Schools), products (for example, a textbook or a particular curriculum), practices (for example, mixed-age grouping), and policies (for example, class size reduction) that can be adopted by multiple schools and districts.

How does the What Works Clearinghouse define “topic”?

A topic is defined by the intended outcome (for example, improving literacy skills), the intended population (for example, elementary school students from low-income backgrounds), and the types of interventions (for example, particular programs, products, practices, or policies) that may produce the intended outcome for that population.

What are WWC Reports?

There are three types of WWC Reports:

- **Study Reports:** Study reports are reviews of individual studies of particular interventions. For example, a study report reviews one study conducted on “Reading Program X.” Each study report has an abstract of the study, the ratings given to the study based on the WWC Standards, a summary of the study's strengths and weaknesses, and findings. If copyright permission is available, the study report links to the full text of the study.
- **Intervention Reports:** Intervention reports provide findings on existing evidence for each particular intervention studied. For example, an intervention report provides findings on all

studies gathered on “Reading Program X.” Each intervention report describes the intervention (for example, program, product, practice, or policy) and has a brief description of each outcome study on this intervention that “Meets Standards” or “Meets Standards with Reservations.” For each study, the report includes a summary of the strengths and weaknesses, and the findings. If there are enough similar studies, the intervention report synthesizes the findings across studies as well. The intervention report links to all related study reports.

- **Topic Reports:** Topic reports provide a synopsis of findings for all interventions in a particular topic. For example, a topic report includes all interventions relevant to a topic, such as “Interventions for Beginning Reading.” Each topic report briefly describes the topic and each intervention that the WWC reviewed and notes the strength of the research on the effects of each intervention. The topic report links to all related intervention reports.

What is the Technical Advisory Group?

The WWC [Technical Advisory Group \(TAG\)](#) is a major intellectual resource and peer review body for the What Works Clearinghouse (WWC). The TAG helps establish the standards for reviewing research, informs the methodological aspects of the evidence reviews, reviews and suggests improvements to WWC Reports, and advises the inclusion of WWC Reports in the WWC databases.

What standards has the What Works Clearinghouse developed for reviewing scientific evidence?

The WWC uses the [WWC Study Review Standards](#) to review the characteristics of effective studies and to identify the strengths and weaknesses of each study's methodology. The WWC Study Review Standards identify studies that are methodologically sound enough to be included in a report on the effects of a specific intervention.

The WWC is currently pilot testing rigorous review standards to weigh the strengths and weaknesses of multiple studies on the same intervention.

How does the What Works Clearinghouse conduct reviews of evidence?

Each What Works Clearinghouse (WWC) topic includes the following:

- a team composed of a Senior Content Advisor, a Methodology Consultant, a Project Coordinator, and research analysts;
- a work plan; and
- a protocol that tailors the WWC Study Review Standards to the subject of each review.

Once a topic is identified, relevant studies are gathered by an extensive search of published and unpublished research literature, including submissions from intervention developers and the public. Each study found to be relevant to a WWC topic undergoes a rigorous review process that follows established WWC procedures. Studies are screened for relevance and design. Those passing screen are reviewed using a coding guide based on the WWC Study Review Standards. A WWC Study

Report is then released for those studies that “Meets Standards” or “Meets Standards with Reservations.” (see FAQ on [What are WWC Reports?](#)). In response to the urgent demand for evidence of what is working in education, individual study reports are placed on a fast track for early release to the public. This modification in the original work plan provides the public with reviews of individual studies as soon as they are completed.

All studies meeting WWC Standards (“Meets Standards” or “Meets Standards with Reservations”) are included in an intervention report (please see FAQ on [What are WWC Reports?](#)). WWC Standards are used to evaluate the strengths of the body of evidence for that intervention. Again, those reports are released as soon as they are completed. A topic report is then developed to briefly summarize evidence of the effectiveness of various interventions that are relevant to a particular topic.

Quality control is built into every stage of the review process. All reports undergo extensive review, including the following (actual reviews differ for topic and intervention versus study reports): fact checking, an opportunity for researchers who conducted the original study to review the study report, an opportunity for the intervention developer to review the intervention report, review by the WWC Steering Committee, review by a panel of anonymous peer reviewers, and review by the Technical Advisory Group (TAG). The U.S. Department of Education reviews the final reports to ensure that the WWC has followed the pre-established processes and adhered to its own high standards.

When reports are completed and approved, they are released through the WWC website. Users can search the WWC databases for study, intervention, and topic reports. New and updated reports are posted online monthly.

What types of research designs “count” as evidence in What Works Clearinghouse reviews?

The appropriate design for scientifically based research depends on the question being asked. The What Works Clearinghouse (WWC) focuses on the question of what works to improve student outcomes, or in other words, what has a *causal effect* on student outcomes. In research that focuses on causal effects, experimental research designs provide the strongest evidence of what works, followed by certain types of quasi-experimental research designs. Other forms of research are more appropriate for other purposes, such as to generate hypotheses or to understand the process through which change happens.

Experimental designs, commonly called randomized controlled trials when conducted in real-world settings, randomly place students, classes, or schools into groups that do or do not participate in an intervention. This type of design is strong because, if done well, it greatly reduces the chance that systematic differences between the intervention group and the control group exist. For example, if students are randomly assigned to one of two groups, then the average ability level of students in the first group is expected to be equal to the average ability level of students in the second group. Therefore, any subsequent group differences in achievement could not be attributed to pre-existing differences between the groups. Strong quasi-experimental designs place students, classes, or schools into groups that do or do not participate in the intervention and control for any initial differences between the groups. If the researchers account for all important differences between the groups, then the design is strong. However, there is always the danger that the research might miss a key

difference between the groups that affects outcomes. The WWC's review of evidence focuses on randomized controlled trials and includes high-quality quasi-experimental research designs as well.

How does the What Works Clearinghouse identify topics for WWC Reports?

To identify topics, the What Works Clearinghouse (WWC) seeks input from those who might use the WWC Reports. Specifically, the WWC solicits nominations through:

- emails from the public;
- meetings and presentations sponsored by the What Works Clearinghouse;
- the What Works Network;
- suggestions presented by senior members of education associations, policymakers, and the U.S. Department of Education; and
- reviews of existing research.

The WWC is continuously seeking nominations for future topics. The list of initial topics currently being reviewed is available on the WWC website. Once new topics are identified, the WWC solicits and searches for relevant studies (both published and unpublished), including studies conducted by program and product developers.

How does the What Works Clearinghouse ensure that the topics are important and useful areas for study?

In choosing topics, the What Works Clearinghouse (WWC) assesses several factors, including:

- potential to improve important student outcomes;
- applicability to a broad range of students or to particularly important subpopulations;
- policy relevance and perceived demand within the education community; and
- likely availability of scientific studies.

WHAT WORKS CLEARINGHOUSE: SERVICES AND PRODUCTS

What products and services offered by the What Works Clearinghouse are available to the education community?

The WWC has several products and services available:

- The WWC has produced WWC Study Review Standards to help users interested in using rigorous standards to consider evidence of effects. The WWC Study Review Standards identifies the strengths and weaknesses of an individual outcome study's methodology. The

WWC is currently pilot testing rigorous review standards to weigh the strengths and weaknesses of multiple studies on the same intervention.

- **WWC Reports** provide evidence of the effectiveness of educational interventions. The review process for WWC Reports is thorough, scientific, and objective. Each step of the process—gathering research literature, reviewing individual studies, and synthesizing the results of reviews—is guided by scientific standards developed by the WWC and leading experts in the field. The WWC reporting process consists of a three-tiered, ongoing system of reports (study, intervention, and topic level):
 - **Study Reports:** Study reports are reviews of individual studies of particular interventions. For example, a study report reviews one study conducted on “Reading Program X.” Each study report has an abstract of the study, the ratings given to the study based on the WWC Standards, a summary of the study's strengths and weaknesses, and findings. If copyright permission is available, the study report links to the full text of the study.
 - **Intervention Reports:** Intervention reports provide findings on existing evidence for each particular intervention studied. For example, an intervention report provides findings on all studies gathered on “Reading Program X.” Each intervention report describes the intervention (for example, program, product, practice, or policy) and has a brief description of each outcome study on this intervention that “Meets Standards” or “Meets Standards with Reservations.” For each study, the report includes a summary of the strengths and weaknesses, and the findings. If there are enough similar studies, the intervention report synthesizes the findings across studies as well. The intervention report links to all related study reports.
 - **Topic Reports:** Topic reports provide a synopsis of findings for all interventions in a particular topic. For example, a topic report includes all interventions relevant to a topic, such as “Interventions for Beginning Reading.” Each topic report briefly describes the topic and each intervention that the WWC reviewed and notes the strength of the research on the effects of each intervention. The topic report links to all related intervention reports.
- The **Registry of Outcome Evaluators** is an online database about evaluators who conduct research on the effects of replicable educational interventions and test instruments. This resource is designed to help schools, school districts, and educational program developers identify potential evaluators to conduct studies on educational outcomes.
- **Collaboration with an extensive network of organizations** representing educators, policymakers, parents, community leaders, researchers, foundations, media, and technical assistance providers, as well as program and product developers, is central to the WWC. The WWC seeks input from all those interested in improving the nature and role of evidence in education and is committed to ensuring that its products and services meet users' needs. The WWC engages the public directly by soliciting input and providing current information through the WWC website, email updates, scheduled public presentations, and published summaries and updates. In addition, the What Works Network, an informal communications network of national organizations that represent key education constituencies, has been formed to help guide the WWC's operation, provide support for WWC goals and activities, and encourage the use of WWC products and services.

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- **Communication of findings** of WWC Reports occurs through the WWC website, presentations, publications, electronic bulletins, and other media. To ensure that this information is widely available, the WWC works closely with an extensive network that represents various education organizations and the public.

How can I access What Works Clearinghouse services?

The What Works Clearinghouse (WWC) website provides the latest information about the project. All WWC services are accessible through this website. The WWC's schedule of upcoming products and activities provides an overview of the plans and progress of the WWC, including information about standards, topics, WWC Reports (study, intervention, and topic), and databases. WWC Reports are available free of charge on the website through user-friendly databases.

To ensure the quality of the WWC's methodology and procedures, they are currently being pilot tested, including focus groups with end users. The WWC wants to ensure that the information and the way it is presented meet the needs of the education community. Ultimately, this addition to the delivery system will provide a stronger end product for education consumers.

What is the sequence for release of WWC Reports?

Topics are being reviewed in waves. In the first wave, the What Works Clearinghouse (WWC) is pilot testing the procedures and reports pertaining to two topics: 1) Curriculum-Based Interventions for Increasing Middle School Math Achievement and 2) Peer-Assisted Learning Interventions.

Why should I be confident that the WWC Reports are thorough, scientific, and objective?

The What Works Clearinghouse (WWC) Reports are grounded in scientific rigor, which is ensured throughout the entire process by:

- following scientific standards for gathering the research literature and reviewing individual studies and bodies of research;
- defining topic-specific research characteristics in consultation with an expert in the topic who does not have a pre-existing relationship with a particular intervention;
- providing an opportunity for researchers who conducted the original study to review the study report;
- providing an opportunity for the intervention developer to review the intervention report;
- establishing a Technical Advisory Group (TAG), experts in research design, program evaluation, and research synthesis, both within and outside the field of education, who consult on and review each WWC Report;
- requiring a review of each WWC Topic and Intervention Report by the chair of the Technical Advisory Group (TAG) and by an anonymous peer review team consisting of experts in the methodology and topic; and

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- making all the definitions, standards, processes, methods, timelines, and studies used in the WWC Reports transparent and accessible to the public.

How does the What Works Clearinghouse ensure that individuals do not misinterpret or misuse its research review standards and resulting findings?

There is no real guarantee that What Works Clearinghouse (WWC) findings will not be misused or misinterpreted by others. The WWC makes a concerted effort to address any misunderstandings and distortions through the WWC website and other public means.

The WWC does not endorse programs, products, practices, or policies. Rather, the WWC evaluates the quality of existing evidence of the effectiveness of educational interventions. This message is articulated in all WWC published materials and WWC Reports.

To further clarify its role, the WWC clearly states that if an evaluation study gets favorable results from the WWC Study Review Standards, or if a body of studies gets a favorable review, it does not mean that the WWC “approves” or “endorses” the intervention being studied. It simply means that the study or studies on a particular intervention were designed and implemented in a way that allows the WWC to have some confidence in the results.

Consistent with the WWC's transparent approach, all standards, research tools, and ratings are available publicly on the website. The WWC characterizes all of its findings, pointing out the value and limitations of the evidence produced to support the education community in making well-informed decisions regarding educational interventions. Distinctions and rating systems are defined in the WWC Reports, on the website, and in print publications.

Registry of Outcome Evaluators

What types of information will be available in the Registry of Outcome Evaluators?

The Registry of Outcome Evaluators is an online database about evaluators (individuals or organizations) who conduct research on the effects of replicable educational interventions and test instruments. This resource is designed to help schools, school districts, and educational program developers identify evaluators to conduct studies on educational outcomes. All evaluators who submit the following information will be included in the registry:

- **contact information:** the name and address of the individual or organization, including electronic contact information;
- **services offered:** experience with randomized controlled trials or quasi-experimental evaluation studies;
- **skills and experience:** the level of experience for each service offered by the individual or organization (or individuals within the organization), including details about prior evaluation experiences, and relevant credentials;

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- **examples, references, and reports:** examples of recent, relevant work, including contact information for project sponsors and examples of public reports, journal articles, and books related to these examples; and
 - a signed letter of commitment to the **What Works Clearinghouse (WWC) Standards:** a signed form stating the evaluator's commitment to use the What Works Clearinghouse standards.

The information in the Registry of Outcome Evaluators is supplied solely by the evaluators themselves. Neither the What Works Clearinghouse (WWC) nor the U.S. Department of Education endorses any individuals or organizations listed in the Registry. Although the WWC does not verify the accuracy of the information submitted by the evaluators nor does it assess their qualifications, the WWC does check the information for completeness and internal consistency.

The Registry of Outcome Evaluators is now accepting registration forms for inclusion in the registry, and public access to those listings will be available in August 2004.

How can I be listed in the Registry of Outcome Evaluators?

The What Works Clearinghouse (WWC) website currently provides registration forms for individual and organizational evaluators to submit required information for inclusion in the Registry of Outcome Evaluators. Evaluators wishing to be notified of the launch of the searchable database should sign up to receive [WWCUpdate](#), the WWC's electronic news alert.

HOW THE EDUCATION COMMUNITY CAN BE INVOLVED

How can I nominate future interventions or topics for a WWC Topic or Intervention Report?

If you would like to nominate an intervention or topic, including your own, for review, go to [submit a topic](#).

How can I nominate a study for consideration for a WWC Study Report?

If you would like to nominate a study on a particular intervention for consideration, visit [submit a study](#).

How can I learn more about the What Works Clearinghouse and contribute to its work?

You can learn about the What Works Clearinghouse (WWC) in various ways:

- **Continue to visit the [WWC website](#).** The WWC website provides an overview of the goals and activities of the WWC, a description of the Technical Advisory Group, which guides the

development of WWC Reports, a schedule of WWC events and presentations, and more. The website is continually updated to provide the latest information about the WWC to the public.

- **Sign up to receive [WWCUpdate](#).** Sign up through the WWC website to receive [WWCUpdate](#), periodic electronic updates on the activities, plans, and products of the WWC.
- **Attend a WWC presentation.** Numerous presentations featuring the WWC are being held across the country. WWC presentations provide an overview of the WWC and its goals and activities, updates on the latest reports issued, and a forum for discussing your questions or concerns with WWC staff. A list of upcoming presentations is available on the WWC website. If you, or your organization, are interested in having the WWC make a presentation, please contact Becky Powell, Communications Specialist for the What Works Clearinghouse, at rpowell@air.org.
- **Look for the latest information about WWC findings and activities in newsletters, listservs, magazines, journals, and newspapers.** The WWC has a proactive approach to sharing evidence of educational effectiveness. To ensure broad access to WWC findings, updates and summaries of findings are published in education and general publications that reach a broad spectrum of readers. If you would like to have WWC findings featured in a specific publication, send an email to info@whatworks.ed.gov with your suggestion.
- **Learn how you or your organization can become a member of the What Works Network (WWN).** The What Works Network is a core group of constituents that includes a variety of organizations representing educators, policymakers, researchers, community leaders, parents, and technical assistance providers. The WWC continues to collaborate with the WWN to ensure that our processes and products are meeting the needs of consumers. The WWN plays a critical role in transmitting the WWC findings to various constituencies. To learn more about how your organization can play a critical role, send an email to info@whatworks.ed.gov.
- **Contact the WWC staff.** If you have comments or questions, send an email to info@whatworks.ed.gov. Your email will be directed to the appropriate WWC staff person. You can also call or write to the WWC at:

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